Addressing the Challenges

- **Challenges**
  - **C1: Flexible interconnect architecture providing throughput and latency which scale with evolving processor capacities**
  - **C2: Predictable control response spanning data acquisition, distribution, and processing**
  - **C3: Connectivity to DoD unique interfaces**
  - **C4: Viable lifetime support philosophy for COTS**

Novel Approaches

- **A1: "Low-power", high speed links and switches (6-> 100 Gbits/sec/W)**
- **A2: Develop new computational model that spans data collection, distribution, and processing**
- **A3: Application of composite protocols with service guarantees**
- **A4: Develop new paradigm for logistical support**

Projected Outcome

- Outcome 1
  - Maintain processor to I/O balance and leverage COTS
- Outcome 2
  - A generic system model leading to a set of configurable components
- Outcome 3
  - Allows for evolution of DoD systems
- Outcome 4
  - Systems that can be supported